

Abstract of the Invention

The invention relates to a method and a device for transpedicular vertebral attachment comprising the steps of drilling a pedicle with a drill as for example a twist drill in order to form a hole in the pedicle; removing the drill from the hole thus formed in the pedicle; screwing a plug into the hole in the pedicle thus formed by the twist drill; whereby an anchorage of the plug is established in the pedicle. The invention also relates to a device for connecting an attachment rod and a pedicular plug in a transpedicular vertebral attachment system, said device comprising: a generally cylindrical, C-shaped member having two ends which form an opening therebetween, the C-shaped member further having a centrally disposed opening, a ball joint being housed in said centrally disposed opening of the C-shaped member, the attachment rod being housed in the ball joint, the ball joint being in direct engagement with the attachment rod; a pair of hollow cylinders, one of the cylinders being attached to each end of the C-shaped members, a screw being received in both of the hollow cylinders, the screw being received insertable in the pedicular plug; and a means, preferably a nut, for locking the screw in position in the pair of hollow cylinders. Finally, the invention relates to a dorsolumbar and lumbosacral vertebral fixation system, wherein the system consists of one or various connectors or couplings, a rod, a transversal traction device and means of vertebral fixation, with assembly carried out by the attaching the tail of the vertebral element - coupling - rod, the first assembly stage of the system being the introduction of the fixation elements, either to the pedicle or the vertebral laminae, a second stage of the insertion of the rod through the connectors, and a third stage in which the connectors are connected to the tails of the fixation elements by means of locknuts.

(Figure 26)